

## REMARKS

### CLAIMS

#### REJECTION OF CLAIMS 1 AND 26 UNDER 35 U.S.C. § 102(b)

Claims 1 and 26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nystrom et al. (U.S. Patent No. 6,195,337).

#### INDEPENDENT CLAIM 1

Regarding independent Claim 1, the Office Action states:

Nystrom discloses a mode determining method. Nystrom's method includes the following:

- generating at least one parameter using at least one word of a voice data stream (Abstract, determines selected mode, cellular radio communications [voice data stream]; Fig. 5, "received code word" estimates generated [at least one parameter]; and
- identifying, based on said at least one parameter, a type of encoding used in generating said voice data stream (Fig. 5, estimates go to "Mode Decision" block, item 16 to determine the type of encoding).

See Office Action at page 2.

Applicant respectfully disagrees with the Examiner's interpretation of what is stated in Nystrom, at the Abstract. The Abstract states that "The mobile station determines the selected mode *by trial decoding possible modes* to find the most probable mode and uses the same mode for transmission to the base station on the return link." Thus, the mobile station selects a mode by "*trial decoding possible modes*." Nowhere does Nystrom disclose "generating at least one parameter using at least one word of a voice data stream," as recited in the first clause of Claim 1. Instead, Nystrom, at Figure 5, discloses decoding a received codeword in a number (N) of

different possible modes, in a trial fashion, which has nothing to do with “generating at least one parameter using at least one word of a voice data stream,” as recited in the first clause of Claim 1. Therefore, for at least the foregoing reasons, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in the first clause of Claim 1. As a consequence, Applicant respectfully submits that Claim 1 contains patentable subject matter and should be advanced to allowance.

With respect to the second clause, the Applicant respectfully disagrees with the Examiner’s interpretation of what is disclosed in Nystrom, at Figure 5. As was previously mentioned by the Applicant with regard to the first clause of Claim 1, Figure 5 is a block diagram that illustrates receiving a codeword and “trial decoding possible modes” (see Abstract, Nystrom) to find the most probable mode. Therefore, Nystrom does not teach “identifying, based on said at least one parameter, a type of encoding used in generating said voice data stream,” as recited in the second clause of Claim 1. Therefore, for at least the foregoing reasons, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in the second clause of Claim 1. As a consequence, Applicant respectfully submits that Claim 1 contains patentable subject matter and should be advanced to allowance.

Furthermore, the Applicant respectfully requests that Claims 2-36 be passed to allowance since, among other reasons, these claims depend on an allowable Claim 1.

#### **DEPENDENT CLAIM 26**

Regarding dependent Claim 26, the Office Action states:

Nystrom teaches everything claimed, as applied above (see claim 1). In addition, Nystrom teaches "performing one or more tests, each

comprising one or more conditions using said at least one parameter" (Fig. 5, the code words produced by the estimated user data is used by the mode decision block, item 16, where the mode decision block with [sic] perform multiple tests).

*See* Office Action at pages 2-3.

Since Claim 26 depends on an allowable Claim 1, Claim 26 is allowable as well. Therefore, for this reason alone, Claim 26 should be advanced to allowance.

With regard to Examiner's remarks regarding Claim 26, the Applicant is unclear as to what Examiner means when he states "where the mode decision block with [sic] perform multiple tests." Because of this reason, Applicant is unable to make a comment regarding this claim, but reserves the right to do so in any future response, should the need arise. The Applicant respectfully requests that the Examiner point out the verbiage within Nystrom that teaches "comprising one or more conditions using said at least one parameter," as recited in Claim 26. Otherwise, the rejection should be withdrawn. Applicant respectfully submits that the Examiner must teach each and every element and/or feature recited in Claim 26 if he wishes to maintain this rejection.

#### **REJECTION OF CLAIMS 1, 4, 9, 14, 26, 52, 53 AND 54 UNDER 35 U.S.C. § 102(b)**

Claims 1, 4, 9, 14, 26, 52, 53 and 54 were rejected under 35 U.S.C. § 102(b) as being anticipated by Alley ("Automatic Identification of voice band telephony coding schemes using neural networks" Electronics Letters, 24<sup>th</sup> June 1993, Vol. 29, No. 13.)

#### **INDEPENDENT CLAIM 1**

Regarding independent Claim 1, the Office Action states:

Alley teaches the automatic identification of coding schemes. In addition, Allen [sic] teaches:

- generating at least one parameter using at least one word of a voice data stream (Abstract, Fig. 1, excitation source, voice, see title of article; the data from the excitation source is processed [generating parameters] and sent to the classifier); and
- identifying, based on said at least one parameter, a type of encoding used in generating said voice data stream (Fig. 1, the classifier determines the encoding type).

See Office Action at page 3.

Applicant respectfully submits that Alley discloses parameters comprising the variance of the maximum adaptive filter coefficient, the measured input signal power, and the probability distribution histogram of the ‘error’ output of the adaptive filter.” (please see first column, last paragraph of Alley). Thus, Alley discloses parameters of an adaptive filter. Therefore, Alley does not disclose “at least one parameter using at least *one word of a voice data stream*,” as recited in Claim 1. Therefore, for at least the foregoing reasons, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in the first clause of Claim 1. As a consequence, Applicant respectfully submits that Claim 1 contains patentable subject matter and should be advanced to allowance.

Furthermore, the Applicant respectfully requests that Claims 2-36 be passed to allowance since, among other reasons, these claims depend on an allowable Claim 1.

#### **DEPENDENT CLAIM 4**

Regarding dependent Claim 4, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1).

In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream corresponding to a range of values" (Fig. 2, histogram is created based on the data received [i.e., the words received]).

See Office Action at page 3.

Applicant respectfully submits that the histogram illustrated in Figure 2 of Alley refers to the probability distribution histogram of the *'error' output of the adaptive filter*. (Please refer to the second column of Alley). Figure 2 of Alley does not teach what is recited in Claim 4. Therefore, the Applicant respectfully submits that the Office Action has not shown a teaching of "wherein said at least one parameter comprises a number of words of said voice data stream corresponding to a range of values," as recited in Claim 4. For at least the foregoing reason, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in Claim 4. As a consequence, Applicant respectfully submits that Claim 4 contains patentable subject matter. Thus, Claim 4 should be advanced to allowance.

Furthermore, since Claim 4 depends on an allowable Claim 1, Claim 4 is allowable as well. Therefore, for this reason alone, Claim 4 should be advanced to allowance.

## **DEPENDENT CLAIM 9**

Regarding dependent Claim 9, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream having p-law linear equivalents corresponding to a range of values" (Fig. 2, probability distribution will correspond to the type of coding; also see p. 1156, col. 1, 11; and p. 1157, col. 2, ¶5).

*See* Office Action at page 4.

Applicant respectfully disagrees that Figure 2 of Alley teaches what is recited in Claim 9. Applicant respectfully disagrees that Figure 2 teaches "a number of words of said voice data stream having  $\mu$ -law equivalents corresponding to a range of values," as recited in Claim 9. As was previously stated by the Applicant with regard to Claim 4, Figure 2 of Alley represents a histogram of the probability distribution histogram of the 'error' output of the adaptive filter. Therefore, for at least the foregoing reason, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in Claim 9. As a consequence, Applicant respectfully submits that Claim 9 contains patentable subject matter and that Claim 9 should be advanced to allowance.

Furthermore, since Claim 9 depends on an allowable Claim 1, Claim 9 is allowable as well. Therefore, for this reason alone, Claim 9 should be advanced to allowance.

#### **DEPENDENT CLAIM 14**

Regarding dependent Claim 14, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream having A-law linear equivalents corresponding to a range of values." (Fig. 2, probability distribution will correspond to the type of coding; also see p. 1156, col. 1, 11; and p. 1157, col. 2, ¶5).

*See* Office Action at page 4.

For the same reasons provided by the Applicant in Claim 9, Applicant respectfully submits that Claim 14 recites patentable subject matter. Applicant respectfully disagrees that

Figure 2 represents “wherein said at least one parameter comprises a number of words of said voice data stream having A-law linear equivalents corresponding to a range of values,” as recited in Claim 14. As was previously stated by the Applicant, Figure 2 of Alley represents a histogram of the probability distribution histogram of the ‘error’ output of the adaptive filter. For at least these reason, the Applicant respectfully submits that the Office Action does not show a teaching of what is recited in Claim 14. As a consequence, Applicant respectfully submits that Claim 14 contains patentable subject matter and that Claim 14 should be advanced to allowance.

Furthermore, since Claim 14 depends on an allowable Claim 1, Claim 14 is allowable as well. Therefore, for this reason alone, Claim 14 should be advanced to allowance.

#### **DEPENDENT CLAIM 26**

Regarding dependent Claim 26, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1).

In addition, Alley teaches "performing one or more tests, each comprising one or more conditions using said at least one parameter" (Fig. 1, the classifier performs tests on the parameters produced).

*See* Office Action at page 4.

Applicant respectfully submits that Claim 26 depends on an allowable Claim 1. Therefore, Claim 26 is allowable as well. Therefore, for this reason alone, Claim 26 should be advanced to allowance.

#### **INDEPENDENT CLAIM 52**

Regarding independent Claim 52, the Office Action states:

Alley teaches a way to identify coding schemes. Alley's teachings

include the following:

- a processor (Fig. 1, a preprocessor);
- a storage device (processor will inherently have memory);
- a set of computer instructions residing in said storage device, said set of computer instructions, when executed by said processor, identifying a type of encoding used in generating said voice data stream, said identifying based on generating a histogram using one of [sic] more words of said voice data stream (abstract, title voice telephony; Fig. 1, "excitation source" where one or more words are processed and result in the generation of a histogram [Fig. 2] which is used for identification).

*See* Office Action at pages 4-5.

Applicant respectfully disagrees that Alley teaches or discloses a storage device as recited in the second clause of Claim 52. Applicant respectfully disagrees with Examiner's statement that a "processor will inherently have memory." Applicant respectfully submits that the Examiner has characterized what is disclosed in Alley, because Alley does not disclose a processor; instead, Alley discloses a "preprocessor." Furthermore, nowhere does Alley disclose a preprocessor that has memory. With regard to the third clause of Claim 52, the Applicant disagrees that Alley discloses "generating a histogram using one or more words of said voice data stream." Applicant requests the Examiner to refer to Applicant's arguments in Claims 9 and 14, for example. Figure 2 of Alley represents a histogram of the probability distribution histogram of the 'error' output of the adaptive filter. Furthermore, Applicant respectfully disagrees that Alley discloses "a set of computer instructions residing in said storage device," as recited in the third clause. As previously mentioned, Applicant respectfully disagrees that Alley discloses "a storage device," much less "a set of computer instructions residing in said storage device," as recited in Claim 52. Consequently, the Applicant respectfully submits that the Office



Action does not show a teaching of what is recited in at least the second and third clauses of Claim 52. If the Examiner wishes to maintain the rejection, the Examiner must show a teaching of each and every element recited in Claim 52. Otherwise, the rejection should be withdrawn. As a consequence, Applicant respectfully submits that Claim 52 contains patentable subject matter and should be advanced to allowance.

Furthermore, the Applicant respectfully submits that Claims 53-65 should be passed to allowance since, among other reasons, these claims depend on an allowable Claim 52.

### **DEPENDENT CLAIM 53**

The Office Action further states:

Alley teaches everything claimed, as applied above (see claim 52).

In addition, Alley teaches "wherein said storage device comprises one of a hard drive, or other memory external to the processor, or memory internal to the Processor" (Fig. 1, indicates a processor which will inherently have associated RAM or internal registers capable of performing a memory function).

*See Office Action at page 5.*

Applicant has previously stated that Alley does not provide any disclosure of a storage device. Nor does Alley disclose anything about a hard drive, memory external to the processor, or memory internal to the processor. Therefore, the Applicant believes that Claim 53 contains patentable subject matter and that Claim 53 should be advanced to allowance.

Furthermore, the Applicant respectfully submits that Claim 53 should be passed to allowance since, among other reasons, it depends on an allowable Claim 52.

**DEPENDENT CLAIM 54**

Regarding dependent Claim 54, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 52).  
In addition, Alley teaches "a network interface for receiving a voice data stream" (p. 1156, introduction, indicates that the application will be used in a telecommunications network which implies an inherent interface to communications).

*See* Office Action at page 5.

Applicant does not see where in the introduction of Alley, there is any disclosure of a "telecommunications network." For this reason alone, the Office Action does not show a teaching of what is recited in Claim 54. Furthermore, Applicant respectfully disagrees that a network interface is taught by way of referring to a "telecommunications network." Therefore, for at least these reasons, the Office Action does not show a teaching of what is recited in Claim 54.

Furthermore, the Applicant respectfully submits that Claim 54 should be passed to allowance since, among other reasons, it depends on an allowable Claim 52.

**REJECTION OF CLAIM 2 UNDER 35 U.S.C. § 103(a)**

Dependent Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Alley in view of Zhang et al. (U.S. Patent No. 7,173,963). Regarding dependent Claim 2, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1).  
Alley teaches the recognition of A-law, p-law (p. 1156, Introduction; and other coding schemes, p. 1157, col. 2, ¶(iii)), but Alley does not specifically teach "wherein said type of encoding comprises linear G.711,

p-law G.711, and A-law G.711 ". However, the examiner contends that this concept was well known in the art, as taught by Zhang.

In the same field of endeavor, teaches [sic] a method for identifying the encoding type of a codec. Zhang's teachings include the various forms of G.711 including PCM [linear], A-law, p-law (Background , col. 1, line 20 through col. 2, line 12).

Therefore, it would, have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the support for the standards, as taught by Zhang , because it is well known in the art at the time of to be advantageous to support communications standards.

*See* Office Action at page 6.

As was previously stated in the Response dated June 12, 2007, the Applicant had stated that Zhang does not disclose "said type of encoding comprises linear G.711. Apparently, the Examiner still believes that Zhang teaches "linear G.711." Applicant requests the Examiner to specifically point out where Zhang teaches "linear G.711." Otherwise, Applicant respectfully submits that Claim 2 contains patentable subject matter that should be advanced to allowance. Thus, for at least this reason, the Applicant believes Claim 2 should be allowed.

Furthermore, the Applicant respectfully submits that Claim 2 should be passed to allowance since, among other reasons, it depends on an allowable Claim 1.

**REJECTION OF CLAIMS 3 AND 55 UNDER 35 U.S.C. § 103(a)**

Claims 3 and 55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alley in view of Kim (U.S. Publication No. 2004/0214551).

### **DEPENDENT CLAIM 3**

Regarding dependent Claim 3, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 1). But Alley does not specifically teach "wherein said voice data stream is stored in a voice data stream file". However, the examiner contends that this concept was well known in the art, as taught by Kim

In the same field of endeavor, Kim discloses a system for transmitting and receiving multimedia data over a network (title, Abstract). In addition, Kim teaches that the data is read from a library server having a plurality of digital information files (¶'s 6, 24), and coupled to a receiving device over a network where the contents received can be stored in non-volatile memory [a voice data stream file] (Fig. 3A, items s300, s400).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Kim, because it is well known in the art at the time of invention for the purpose of supporting a multimedia communication environment (18).

*See Office Action at page 7.*

The Applicant respectfully submits that Claim 3 should be passed to allowance since, among other reasons, it depends on an allowable Claim 1.

### **DEPENDENT CLAIM 55**

Regarding dependent Claim 55, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 53). But Alley does not specifically teach "a media reader capable of reading a media containing a voice data stream file and capable of transmitting a voice data stream of said voice data stream file to said storage device.

However, the examiner contends that this concept was well known in the art, as taught by Kim

In the same field of endeavor, Kim discloses a system for transmitting and receiving multimedia data over a network (title, Abstract). In addition, Kim teaches that the data is read from a library server having a plurality of digital information files (¶'s 6, 24), and coupled to a receiving device over a network where the contents received can be stored in non-volatile memory (Fig. 3A, items s300, s400).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Kim, because it is well known in the art at the time of invention for the purpose of supporting a multimedia communication environment (18).

*See* Office Action at pages 7-8.

The Applicant respectfully submits that Claim 55 should be passed to allowance since, among other reasons, it depends on an allowable Claim 52.

The Applicant may not have commented on the remarks made by the Examiner on dependent Claims 3 and 55 because of the foregoing arguments made with respect to independent Claims 1 and 52, respectively, but reserves the right to do so in any future response, should the need arise. The Applicant respectfully requests allowance of Claims 3 and 55.

#### **REJECTION OF CLAIM 56 UNDER 35 U.S.C. § 103(a)**

Dependent Claim 56 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Alley in view of Shaffer et al. (U.S. Patent No. 6,324,409). Regarding dependent Claim 56, the Office Action states:

Alley teaches everything claimed, as applied above (see claim 52).

But Alley does not specifically teach "a user interface for executing said set of computer instructions." However, the examiner contends that this concept was well known in the art, as taught by Shaffer.

In the same field of endeavor, Shaffer discloses a system and method for optimizing telecommunication quality. Shaffer also teaches the use of a general purpose computer system for control. Shaffer's computer system includes input and output and and [sic] a display device (Fig. 1, col. 3, line 63 through col. 4, line 11).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Shaffer, because it is well known in the art at the time of invention for the purpose of providing an interface to control the system (col. 4, lines 7-10).

*See Office Action at page 8.*

The Applicant respectfully respectfully submits that Claim 56 should be passed to allowance since, for among other reasons, it depends on an allowable Claim 52. The Applicant has not commented on the remarks made by the Examiner with regard to Claim 56 because of the foregoing arguments made with respect to independent Claim 52, but reserves the right to do so in any future response should the need arise. The Applicant respectfully requests allowance of Claim 56.

**ALLOWABLE SUBJECT MATTER**

Applicant appreciates and gratefully acknowledges the indication by the Examiner that Claims 37-46, 48-51 and 66-88 are allowed.

Also, the Applicant gratefully acknowledges the indication by the Examiner regarding the allowable subject matter in Claims 5-8, 10-13, 15-25, 27-36 and 57-65. Claims 5-8, 10-13, 15-25, 27-36 and 57-65 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. The Applicant has rewritten Claims 5, 7, 10, 12, 15, 17, and 57-65 in independent form to include all of the elements of the rejected base claim and any intervening claims. These new claims are presented as Claims 89-103. Applicant respectfully submits that Claims 89-103 are in condition for allowance.

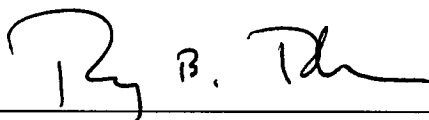
### CONCLUSION

Applicant gratefully acknowledges the allowance of Claims 37-46, 48-51 and 66-88 by the Examiner. Furthermore, the Applicant gratefully acknowledges the indication by the Examiner regarding the allowable subject matter in Claims 5-8, 10-13, 15-25, 27-36 and 57-65. Based on at least the foregoing Applicant's arguments / remarks, the Applicant believes that all pending claims are in condition for allowance. A Notice of Allowance is courteously solicited. Should anything remain in order to place the present Application in condition for allowance, or should the Examiner disagree or have any question regarding this submission, the Examiner is kindly invited to contact the undersigned at (312) 775-8246.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

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Respectfully submitted,



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Roy B. Rhee  
Reg. No. 57,303

McAndrews, Held & Malloy, Ltd.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661-2565  
Telephone: (312) 775-8246  
Facsimile: (312) 775-8100